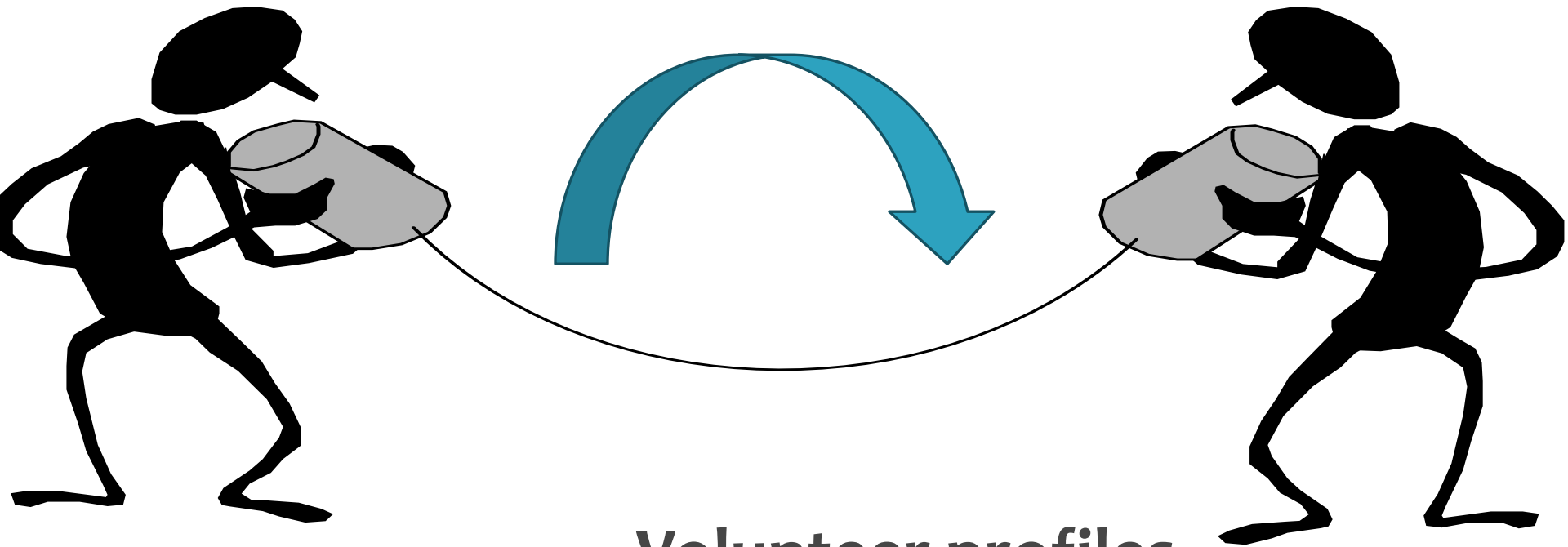


What's New?

VLAP Program Initiatives

VLAP Initiative I

Getting to know you

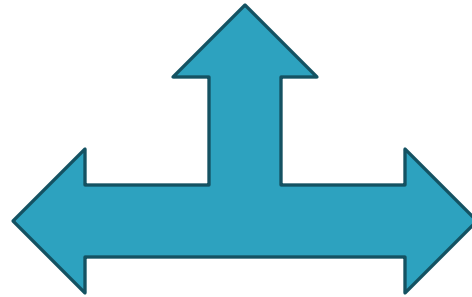


Volunteer profiles

VLAP Initiative I

Acknowledgements

Years of service



Time



VLAP Initiative II

* **Citizen Science Lecture Series**

- * Provide current information in the fields of limnology, biology, ecology, environmental science, etc...
- * Engage and interact with other citizen scientists throughout the state.

<http://des.nh.gov/organization/divisions/water/wmb/vlap/citizen-science.htm>

Citizen Science
Lecture Series
Summer, 2014

Loons and the Health of Our Lakes

TUESDAY, JULY 22, 2014
6:00—7:00 P.M.
THE LOON CENTER
183 LEES MILLS ROAD
MOULTONBOROUGH, NH 03254



*This series aims to provide citizen scientists
with current information in the fields of
limnology, biology, ecology, wildlife, and
environmental science.*

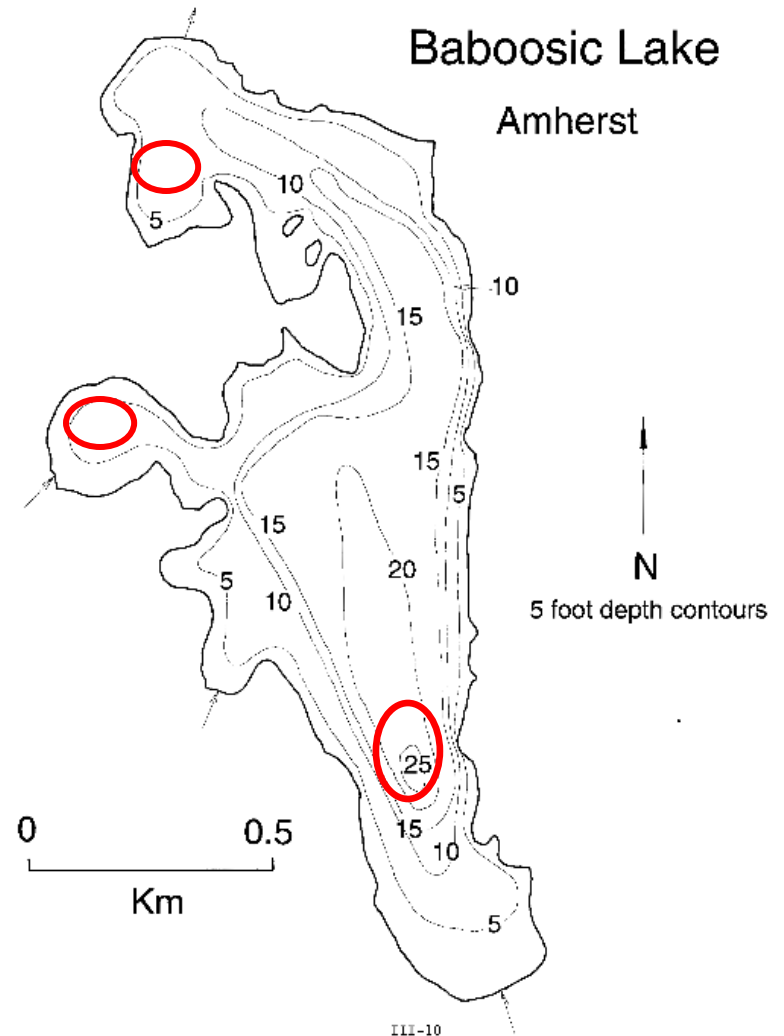
Sponsored by:
NHDES JCLC
29 Hazen Drive
Concord, NH 03302
sara.steiner@des.nh.gov



VLAP Initiative III

* Cyanobacteria Monitoring

- * Finalize protocols
 - * Basic: one sample at deep site
 - * Advanced: additional samples at near shore sites
- * Voluntary participation
- * Bottles and equipment
- * Analysis
- * Training session?





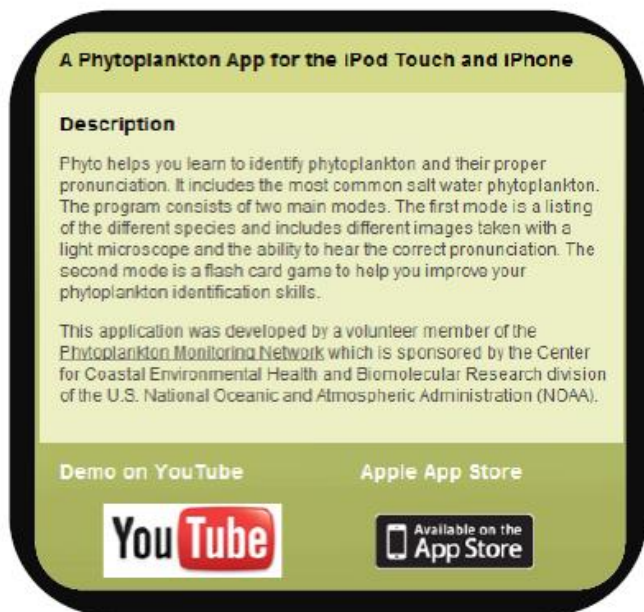
Flash Card Game



Image Gallery &
Pronunciations



Species List



Developed by PMN volunteer Shawn Gano, to assist with and to improve volunteer's identification skills of marine algae in the Gulf of Mexico region.



VLAP Initiative IV

Mercury in Fish Program

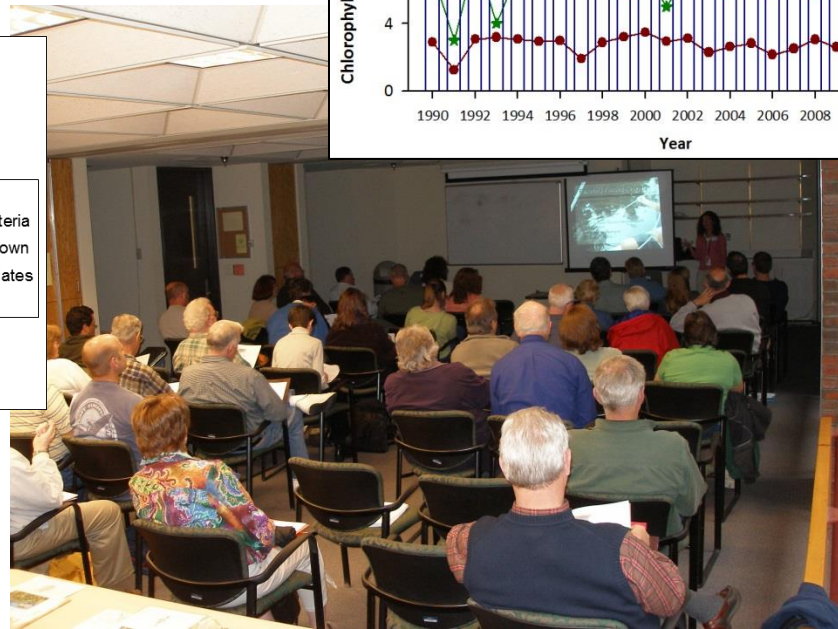
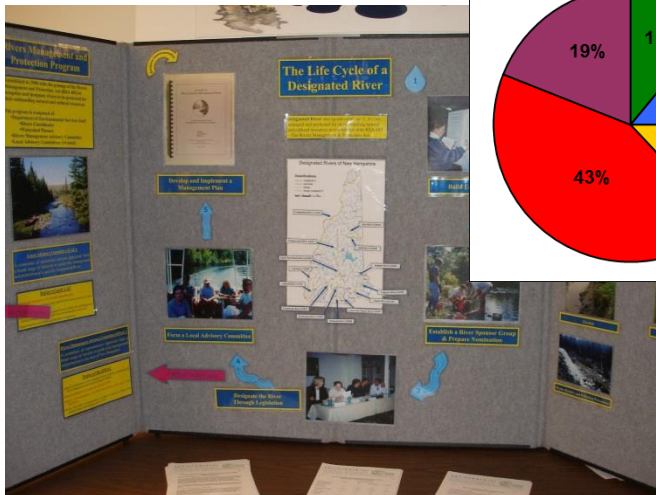
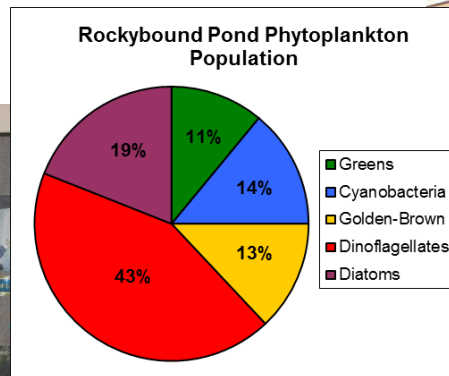
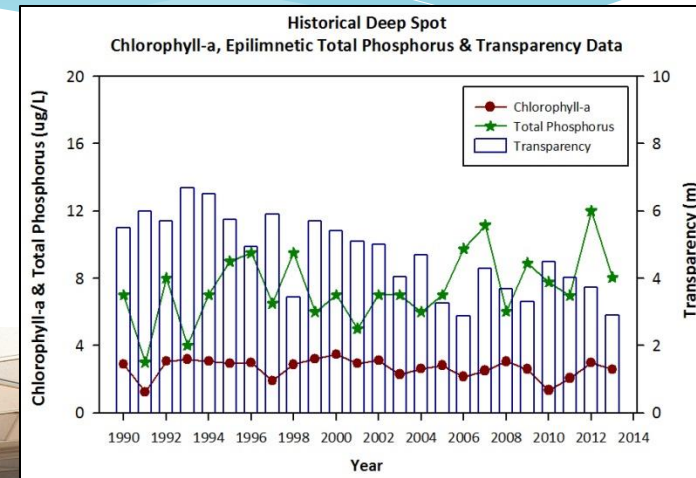
- * Not new initiative, but occasionally need to update statewide fish consumption advisories.
- * Assess effectiveness of pollution control efforts to reduce mercury.
- * Specifically, fish requested from five lakes:
 - * Bow Lake, Strafford
 - * Mendums Pond and Swains Lake, Barrington
 - * Northwood Lake, Northwood
 - * Pawtuckaway Lake, Nottingham
- * Protocol included in packet.
- * Drop fish off at the JCLC.



VLAP Initiative V

* Communicating Monitoring Data

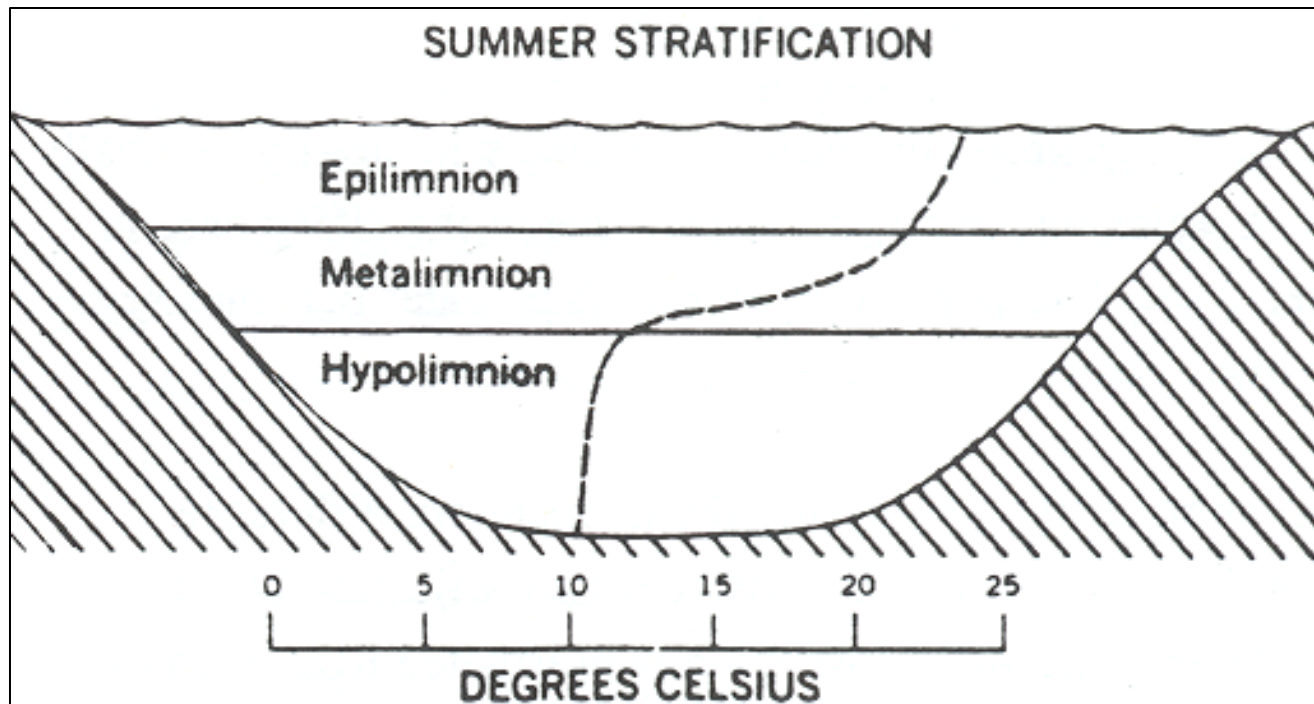
- * What do you do with the data?
- * Power point template
- * Training



VLAP Initiative VI

* Temperature Profiles

- * Identify the boundary between different thermal layers.
- * Only applies to lakes with at least two thermal layers.
- * Generally lakes 6m (18-20 ft.) or greater in depth.



VLAP Initiative VI

* Temperature Profiles

- * Goal: select sample depth in middle of each thermal layer
 - * Deep spot and chlorophyll-a sample depths may change monthly as thermal layers become more defined.
- * More accurately assess nutrient and chlorophyll levels.
- * ClineFinder digital thermometer with 15 m cord.
- * Methodology in field manual, packet, and will be laminated and attached to meters.
- * Field data sheets to record depth and temperature readings.

VLAP Initiative VI

2014 Sample Depths (meters): 2, 7, 13

2013 Sample Depths (meters): 2, 8, 14

Modify chlorophyll-a starting depth to
metalimnion depth: 7

| Depth | Temp (°C) |
|-------|-----------|
| 0.1 | 16.5 |
| 1 | 16.5 |
| 2 | 16.5 |
| 3 | 16.4 |
| 4 | 16.1 |
| 5 | 15.1 |
| 6 | 13.9 |
| 7 | 12.7 |
| 8 | 11.9 |
| 9 | 10.8 |
| 10 | 9.7 |
| 11 | 9.5 |
| 12 | 9.5 |
| 13 | 9.5 |
| 14 | 9.4 |
| 15 | 9.4 |

Epilimnion

Metalimnion

Hypolimnion

VLAP Initiative VI

* Temperature Profile

- * Don't worry about making a mistake
- * When in doubt refer back to old sample depths
- * Have questions, ask!